```
FILE 'HOME' ENTERED AT 14:32:43 ON 22 JUL 2002

=> INDEX CHEMISTRY PHARMACOLOGY BIOSCIENCE MEETINGS TOXICOLOGY
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY     SESSION
FULL ESTIMATED COST                                         0.42        0.42

INDEX 'AGRICOLA, ALUMINIUM, ANABSTR, BABS, BIOCOMMERCE, BIOTECHNO, CABA, CAOLD,
       CAPLUS, CBNB, CEABA-VTB, CEN, CERAB, CIN, COMPENDEX, CONFSCI, COPPERLIT,
       CORROSION, DKILIT, ENCOMPLIT, ENCOMPLIT2, FEDRIP, GENBANK, INSPEC,
       INSPHYS, INVESTEXT, IPA, JICST-EPLUS, ...' ENTERED AT 14:33:46 ON 22 JUL 2002

105 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

=> s hepcidin
          1   FILE AGRICOLA
          9   FILE BIOTECHNO
          2   FILE CABA
         12   FILE CAPLUS
          1   FILE CONFSCI
         13   FILE GENBANK
  30 FILES SEARCHED...
          1   FILE PASCAL
         12   FILE SCISEARCH
  44 FILES SEARCHED...
          9   FILE BIOSIS
  52 FILES SEARCHED...
  55 FILES SEARCHED...
          1   FILE EMBAL
         11   FILE EMBASE
          7   FILE ESBIOBASE
          4   FILE LIFESCI
         12   FILE MEDLINE
          6   FILE TOXCENTER
  79 FILES SEARCHED...
 103 FILES SEARCHED...

  15 FILES HAVE ONE OR MORE ANSWERS,  105 FILES SEARCHED IN STNINDEX

L1    QUE HEPCIDIN

=> fit hits
FIT IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l1 and (pharmaceutical (w) composition)
  26 FILES SEARCHED...
<------User Break------>
u
=> file hits
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY     SESSION
FULL ESTIMATED COST                                         3.18        3.60

FILE 'GENBANK' ENTERED AT 14:37:23 ON 22 JUL 2002

FILE 'CAPLUS' ENTERED AT 14:37:23 ON 22 JUL 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE 'SCISEARCH' ENTERED AT 14:37:23 ON 22 JUL 2002
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FILE 'MEDLINE' ENTERED AT 14:37:23 ON 22 JUL 2002

FILE 'EMBASE' ENTERED AT 14:37:23 ON 22 JUL 2002
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FILE 'BIOTECHNO' ENTERED AT 14:37:23 ON 22 JUL 2002
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FILE 'BIOSIS' ENTERED AT 14:37:23 ON 22 JUL 2002
COPYRIGHT (C) 2002 BIOLOGICAL ABSTRACTS INC. (R)

FILE 'ESBIOBASE' ENTERED AT 14:37:23 ON 22 JUL 2002
COPYRIGHT (C) 2002 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'TOXCENTER' ENTERED AT 14:37:23 ON 22 JUL 2002
COPYRIGHT (C) 2002 ACS

FILE 'LIFESCI' ENTERED AT 14:37:23 ON 22 JUL 2002
COPYRIGHT (C) 2002 Cambridge Scientific Abstracts (CSA)

FILE 'CABA' ENTERED AT 14:37:23 ON 22 JUL 2002
COPYRIGHT (C) 2002 CAB INTERNATIONAL (CABI)

FILE 'AGRICOLA' ENTERED AT 14:37:23 ON 22 JUL 2002

FILE 'CONFSCI' ENTERED AT 14:37:23 ON 22 JUL 2002
COPYRIGHT (C) 2002 Cambridge Scientific Abstracts (CSA)

FILE 'PASCAL' ENTERED AT 14:37:23 ON 22 JUL 2002
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FILE 'EMBAL' ENTERED AT 14:37:23 ON 22 JUL 2002
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=> s l1 and (pharmaceutical (w) composition)
L2 0 FILE GENBANK
L3 0 FILE CAPLUS
L4 0 FILE SCISEARCH
L5 0 FILE MEDLINE
L6 0 FILE EMBASE
L7 0 FILE BIOTECHNO
L8 0 FILE BIOSIS
L9 0 FILE ESBIOBASE
L10 0 FILE TOXCENTER
L11 0 FILE LIFESCI
L12 0 FILE CABA
L13 0 FILE AGRICOLA
L14 0 FILE CONFSCI
L15 0 FILE PASCAL
L16 0 FILE EMBAL

TOTAL FOR ALL FILES
L17 0 L1 AND (PHARMACEUTICAL (W) COMPOSITION)

=> s l1
L18 13 FILE GENBANK
L19 12 FILE CAPLUS
L20 12 FILE SCISEARCH

```
L21          12 FILE MEDLINE
L22          11 FILE EMBASE
L23           9 FILE BIOTECHNO
L24           9 FILE BIOSIS
L25           7 FILE ESBIOBASE
L26           6 FILE TOXCENTER
L27           4 FILE LIFESCI
L28           2 FILE CABA
L29           1 FILE AGRICOLA
L30           1 FILE CONFSCI
L31           1 FILE PASCAL
L32           1 FILE EMBAL

TOTAL FOR ALL FILES
L33         101 L1

=> s l33 and pharmaceutical
L34           0 FILE GENBANK
L35           0 FILE CAPLUS
L36           0 FILE SCISEARCH
L37           0 FILE MEDLINE
L38           0 FILE EMBASE
L39           0 FILE BIOTECHNO
L40           0 FILE BIOSIS
L41           0 FILE ESBIOBASE
L42           0 FILE TOXCENTER
L43           0 FILE LIFESCI
L44           0 FILE CABA
L45           0 FILE AGRICOLA
L46           0 FILE CONFSCI
L47           0 FILE PASCAL
L48           0 FILE EMBAL

TOTAL FOR ALL FILES
L49           0 L33 AND PHARMACEUTICAL

=> s l33 and carrier
L50           0 FILE GENBANK
L51           0 FILE CAPLUS
L52           0 FILE SCISEARCH
L53           0 FILE MEDLINE
L54           0 FILE EMBASE
L55           0 FILE BIOTECHNO
L56           0 FILE BIOSIS
L57           0 FILE ESBIOBASE
L58           0 FILE TOXCENTER
L59           0 FILE LIFESCI
L60           0 FILE CABA
L61           0 FILE AGRICOLA
L62           0 FILE CONFSCI
L63           0 FILE PASCAL
L64           0 FILE EMBAL

TOTAL FOR ALL FILES
L65           0 L33 AND CARRIER

=> s l33 and toxic and therapeutic
L66           0 FILE GENBANK
L67           0 FILE CAPLUS
L68           0 FILE SCISEARCH
L69           0 FILE MEDLINE
L70           0 FILE EMBASE
L71           0 FILE BIOTECHNO
L72           0 FILE BIOSIS
L73           0 FILE ESBIOBASE
L74           0 FILE TOXCENTER
```

```
L75             0 FILE LIFESCI
L76             0 FILE CABA
L77             0 FILE AGRICOLA
L78             0 FILE CONFSCI
L79             0 FILE PASCAL
L80             0 FILE EMBAL

TOTAL FOR ALL FILES
L81             0 L33 AND TOXIC AND THERAPEUTIC

=> s l33 and toxic
L82             0 FILE GENBANK
L83             0 FILE CAPLUS
L84             0 FILE SCISEARCH
L85             0 FILE MEDLINE
L86             0 FILE EMBASE
L87             0 FILE BIOTECHNO
L88             0 FILE BIOSIS
L89             0 FILE ESBIOBASE
L90             0 FILE TOXCENTER
L91             0 FILE LIFESCI
L92             0 FILE CABA
L93             0 FILE AGRICOLA
L94             0 FILE CONFSCI
L95             0 FILE PASCAL
L96             0 FILE EMBAL

TOTAL FOR ALL FILES
L97             0 L33 AND TOXIC

=> s l33 and pollutant
L98             0 FILE GENBANK
L99             0 FILE CAPLUS
L100            0 FILE SCISEARCH
L101            0 FILE MEDLINE
L102            0 FILE EMBASE
L103            0 FILE BIOTECHNO
L104            0 FILE BIOSIS
L105            0 FILE ESBIOBASE
L106            0 FILE TOXCENTER
L107            0 FILE LIFESCI
L108            0 FILE CABA
L109            0 FILE AGRICOLA
L110            0 FILE CONFSCI
L111            0 FILE PASCAL
L112            0 FILE EMBAL

TOTAL FOR ALL FILES
L113            0 L33 AND POLLUTANT

=> s hepcidin and pollutant
L114            0 FILE GENBANK
L115            0 FILE CAPLUS
L116            0 FILE SCISEARCH
L117            0 FILE MEDLINE
L118            0 FILE EMBASE
L119            0 FILE BIOTECHNO
L120            0 FILE BIOSIS
L121            0 FILE ESBIOBASE
L122            0 FILE TOXCENTER
L123            0 FILE LIFESCI
L124            0 FILE CABA
L125            0 FILE AGRICOLA
L126            0 FILE CONFSCI
L127            0 FILE PASCAL
L128            0 FILE EMBAL
```

```
TOTAL FOR ALL FILES
L129          0 HEPCIDIN AND POLLUTANT

=> s hepcidin and (toxicological or toxicology)
L130          0 FILE GENBANK
L131          0 FILE CAPLUS
L132          0 FILE SCISEARCH
L133          0 FILE MEDLINE
L134          0 FILE EMBASE
L135          0 FILE BIOTECHNO
L136          0 FILE BIOSIS
L137          0 FILE ESBIOBASE
L138          0 FILE TOXCENTER
L139          0 FILE LIFESCI
L140          0 FILE CABA
L141          0 FILE AGRICOLA
L142          0 FILE CONFSCI
L143          0 FILE PASCAL
L144          0 FILE EMBAL

TOTAL FOR ALL FILES
L145          0 HEPCIDIN AND (TOXICOLOGICAL OR TOXICOLOGY)

=> s hepcidin and therapeutical
L146          0 FILE GENBANK
L147          0 FILE CAPLUS
L148          0 FILE SCISEARCH
L149          0 FILE MEDLINE
L150          0 FILE EMBASE
L151          0 FILE BIOTECHNO
L152          0 FILE BIOSIS
L153          0 FILE ESBIOBASE
L154          0 FILE TOXCENTER
L155          0 FILE LIFESCI
L156          0 FILE CABA
L157          0 FILE AGRICOLA
L158          0 FILE CONFSCI
L159          0 FILE PASCAL
L160          0 FILE EMBAL

TOTAL FOR ALL FILES
L161          0 HEPCIDIN AND THERAPEUTICAL

=> s hepcidin and environment
L162          0 FILE GENBANK
L163          0 FILE CAPLUS
L164          0 FILE SCISEARCH
L165          0 FILE MEDLINE
L166          0 FILE EMBASE
L167          0 FILE BIOTECHNO
L168          0 FILE BIOSIS
L169          0 FILE ESBIOBASE
L170          0 FILE TOXCENTER
L171          0 FILE LIFESCI
L172          0 FILE CABA
L173          0 FILE AGRICOLA
L174          0 FILE CONFSCI
L175          0 FILE PASCAL
L176          0 FILE EMBAL

TOTAL FOR ALL FILES
L177          0 HEPCIDIN AND ENVIRONMENT

=> dup rem l33
DUPLICATE IS NOT AVAILABLE IN 'GENBANK'.
```

ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L33
L178 33 DUP REM L33 (68 DUPLICATES REMOVED)

=> d l178 1-33 ibib abs
NO VALID FORMATS ENTERED FOR FILE 'GENBANK'
In a multifile environment, each file must have at least one valid format requested. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):d l178 1-3 ibib abs
'D' IS NOT A VALID FORMAT
'L178' IS NOT A VALID FORMAT
'1-3' IS NOT A VALID FORMAT
In a multifile environment, a format can only be used if it is valid in at least one of the files. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):
<------User Break------>

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):end

=> d l1781 1-3 ibib abs
'L1781' IS NOT A VALID FORMAT
In a multifile environment, a format can only be used if it is valid in at least one of the files. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):l178
'L178' IS NOT A VALID FORMAT
In a multifile environment, a format can only be used if it is valid in at least one of the files. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):end

=> d l178 1-5 ibib abs

L178 ANSWER 1 OF 33 MEDLINE DUPLICATE 1
ACCESSION NUMBER: 2002106063 MEDLINE
DOCUMENT NUMBER: 21826274 PubMed ID: 11836175
TITLE: Absence of **hepcidin** gene mutations in 10 Italian patients with primary iron overload.
COMMENT: Comment in: Haematologica. 2002 Feb;87(2):115-6
AUTHOR: Majore Silvia; Binni Francesco; Ricerca Bianca Maria; Brioli Gloria; Grammatico Paola
SOURCE: HAEMATOLOGICA, (2002 Feb) 87 (2) 221-2.
Journal code: 0417435. ISSN: 0390-6078.
PUB. COUNTRY: Italy
Letter
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200204
ENTRY DATE: Entered STN: 20020212
Last Updated on STN: 20020416
Entered Medline: 20020415
AB We analyzed the **hepcidin** gene in 10 Italian patients with hemochromatosis not related to C282Y, H63D or other less frequent HFE mutations, nor to Y250X in TFR2. The sequencing of the whole **hepcidin** coding region, intron-exon junctions, 5' and partially 3'UTRs, did not reveal any alteration in the studied patients.

L178 ANSWER 2 OF 33 MEDLINE
ACCESSION NUMBER: 2002106048 MEDLINE
DOCUMENT NUMBER: 21826258 PubMed ID: 11836159

TITLE: Novel genes, proteins, and inherited disorders of iron overload: iron metabolism is less boring than thought.
COMMENT: Comment on: Haematologica. 2002 Feb;87(2):221-2
AUTHOR: Cazzola Mario
SOURCE: HAEMATOLOGICA, (2002 Feb) 87 (2) 115-6.
Journal code: 0417435. ISSN: 0390-6078.
PUB. COUNTRY: Italy
Commentary
Editorial
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: OMIM-235200; OMIM-602390; OMIM-604250; OMIM-606069
ENTRY MONTH: 200204
ENTRY DATE: Entered STN: 20020212
Last Updated on STN: 20020416
Entered Medline: 20020415

L178 ANSWER 3 OF 33 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2
ACCESSION NUMBER: 2002:290294 CAPLUS
DOCUMENT NUMBER: 137:45188
TITLE: Severe iron deficiency anemia in transgenic mice expressing liver **hepcidin**
AUTHOR(S): Nicolas, Gael; Bennoun, Myriam; Porteu, Arlette; Mativet, Sandrine; Beaumont, Carole; Grandchamp, Bernard; Sirito, Mario; Sawadogo, Michele; Kahn, Axel; Vaulont, Sophie
CORPORATE SOURCE: Departement de genetique, developpement et Pathologie Moleculaire, Institut Cochin, Institut National de la Sante et de la Recherche Medicale, Centre National de la Recherche Scientifique, et Universite Rene Descartes, Faculte de Medecine Cochin-Port Royal, Paris, 75014, Fr.
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2002), 99(7), 4596-4601
CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English
AB We recently reported the hemochromatosis-like phenotype obsd. in our Usf2 knockout mice. In these mice, as in murine models of hemochromatosis and patients with hereditary hemochromatosis, iron accumulates in parenchymal cells (in particular, liver and pancreas), whereas the reticuloendothelial system is spared from this iron loading. We suggested that this phenotypic trait could be attributed to the absence, in the Usf2 knockout mice, of a secreted liver-specific peptide, **hepcidin**. We conjectured that the reverse situation, namely overexpression of **hepcidin**, might result in phenotypic traits of iron deficiency. This question was addressed by generating transgenic mice expressing **hepcidin** under the control of the liver-specific transthyretin promoter. We found that the majority of the transgenic mice were born with a pale skin and died within a few hours after birth. These transgenic animals had decreased body iron levels and presented severe microcytic hypochromic anemia. So far, three mosaic transgenic animals have survived. They were unequivocally identified by phys. features, including reduced body size, pallor, hairless and crumpled skin. These pleiotropic effects were found to be assocd. with erythrocyte abnormalities, with marked anisocytosis, poikylocytosis and hypochromia, which are features characteristic of iron-deficiency anemia. These results strongly support the proposed role of **hepcidin** as a putative iron-regulatory hormone. The animal models devoid of **hepcidin** (the Usf2 knockout mice) or overexpressing the peptide (the transgenic mice presented in this paper) represent valuable tools for investigating iron homeostasis in vivo and for deciphering the mol. mechanisms of **hepcidin** action.
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L178 ANSWER 4 OF 33 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 3
ACCESSION NUMBER: 2002:351679 CAPLUS
TITLE: Bass **hepcidin** is a novel antimicrobial peptide induced by bacterial challenge
AUTHOR(S): Shike, Hiroko; Lauth, Xavier; Westerman, Mark E.; Ostland, Vaughn E.; Carlberg, James M.; Van Olst, Jon C.; Shimizu, Chisato; Bulet, Philippe; Burns, Jane C.
CORPORATE SOURCE: Department of Pediatrics, San Diego School of Medicine, University of California, La Jolla, CA, 92093-0830, USA
SOURCE: European Journal of Biochemistry (2002), 269(8), 2232-2237
CODEN: EJBCAI; ISSN: 0014-2956
PUBLISHER: Blackwell Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB We report the isolation of a novel antimicrobial peptide, bass **hepcidin**, from the gill of hybrid striped bass, white bass (Morone chrysops) .times. striped bass (M. saxatilis). After the i.p. injection of Micrococcus luteus and Escherichia coli, the peptide was purified from HPLC fractions with antimicrobial activity against Escherichia coli. Sequencing by Edman degrdn. revealed a 21-residue peptide (GCRFCCNCCPNMSGCGVCCRF) with eight putative cysteines. Mol. mass measurements of the native peptide and the reduced and alkylated peptide confirmed the sequence with four intramol. disulfide bridges. Peptide sequence homol. to human **hepcidin** and other predicted **hepcidins**, indicated that the peptide is a new member of the **hepcidin** family. Nucleotide sequences for cDNA and genomic DNA were detd. for white bass. A predicted prepropeptide (85 amino acids) consists of three domains: a signal peptide (24 amino acids), prodomain (40 amino acids) and a mature peptide (21 amino acids). The gene has two introns and three exons. A TATA box and several consensus-binding motifs for transcription factors including C/EBP, nuclear factor-.kappa.B, and hepatocyte nuclear factor were found in the region upstream of the transcriptional start site. In white bass liver, **hepcidin** gene expression was induced 4500-fold following challenge with the fish pathogen, Streptococcus iniae, while expression levels remained low in all other tissues tested. A novel antimicrobial peptide from the gill, bass **hepcidin**, is predominantly expressed in the liver and highly inducible by bacterial exposure.
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L178 ANSWER 5 OF 33 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2002172161 EMBASE
TITLE: Molecular diversity in gene-encoded, cationic antimicrobial polypeptides.
AUTHOR: Tossi A.; Sandri L.
CORPORATE SOURCE: A. Tossi, Dept. Biochem. Biophys./Mol. Chem., University of Trieste, Via Giorgieri 1, 34127 Trieste, Italy. tossi@bbcm.univ.trieste.it
SOURCE: Current Pharmaceutical Design, (2002) 8/9 (743-761).
Refs: 137
ISSN: 1381-6128 CODEN: CPDEFP
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 004 Microbiology
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Gene-encoded, ribosomally synthesised antimicrobial peptides (AMPs) are an ancient and pervasive component of the innate defence mechanisms used by multicellular organisms to control the natural flora and combat pathogens. Bacteria also produce such AMPs to maintain ecological niches free of

rival strains. Several hundred different peptides have been characterised to date, and they show a marked degree of variability in both sequence and structure, having evolved to act against distinct microbial targets in different physiological contexts. Many of these peptides appear to function via a selective, but not receptor-mediated, permeabilisation of microbial membranes, while others interact with specific membrane associated or intracellular targets. This review presents a broad survey of different AMP structural classes, emphasising both their molecular diversity and underlying similarities. The mode of action of these peptides and potential for biomedical and other application is also briefly discussed.

=> d l78 6-33 ibib abs
L78 HAS NO ANSWERS
L30 1 SEA FILE=CONFSCI ABB=ON PLU=ON HEPCIDIN
L78 0 SEA FILE=CONFSCI ABB=ON PLU=ON L30 AND TOXIC AND THERAPEUTIC

=> d l178 6-33 ibib abs
NO VALID FORMATS ENTERED FOR FILE 'GENBANK'
In a multifile environment, each file must have at least one valid format requested. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):end

=> d l178 3-15 ibib abs

L178 ANSWER 3 OF 33 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2
ACCESSION NUMBER: 2002:290294 CAPLUS
DOCUMENT NUMBER: 137:45188
TITLE: Severe iron deficiency anemia in transgenic mice expressing liver **hepcidin**
AUTHOR(S): Nicolas, Gael; Bennoun, Myriam; Porteu, Arlette; Mativet, Sandrine; Beaumont, Carole; Grandchamp, Bernard; Sirito, Mario; Sawadogo, Michele; Kahn, Axel; Vaulont, Sophie
CORPORATE SOURCE: Departement de genetique, developpement et Pathologie Moleculaire, Institut Cochin, Institut National de la Sante et de la Recherche Medicale, Centre National de la Recherche Scientifique, et Universite Rene Descartes, Faculte de Medecine Cochin-Port Royal, Paris, 75014, Fr.
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2002), 99(7), 4596-4601
CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English
AB We recently reported the hemochromatosis-like phenotype obsd. in our Usf2 knockout mice. In these mice, as in murine models of hemochromatosis and patients with hereditary hemochromatosis, iron accumulates in parenchymal cells (in particular, liver and pancreas), whereas the reticuloendothelial system is spared from this iron loading. We suggested that this phenotypic trait could be attributed to the absence, in the Usf2 knockout mice, of a secreted liver-specific peptide, **hepcidin**. We conjectured that the reverse situation, namely overexpression of **hepcidin**, might result in phenotypic traits of iron deficiency. This question was addressed by generating transgenic mice expressing **hepcidin** under the control of the liver-specific transthyretin promoter. We found that the majority of the transgenic mice were born with a pale skin and died within a few hours after birth. These transgenic animals had decreased body iron levels and presented severe microcytic hypochromic anemia. So far, three mosaic transgenic animals

have survived. They were unequivocally identified by phys. features, including reduced body size, pallor, hairless and crumpled skin. These pleiotropic effects were found to be assocd. with erythrocyte abnormalities, with marked anisocytosis, poikylocytosis and hypochromia, which are features characteristic of iron-deficiency anemia. These results strongly support the proposed role of **hepcidin** as a putative iron-regulatory hormone. The animal models devoid of **hepcidin** (the Usf2 knockout mice) or overexpressing the peptide (the transgenic mice presented in this paper) represent valuable tools for investigating iron homeostasis in vivo and for deciphering the mol. mechanisms of **hepcidin** action.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L178 ANSWER 4 OF 33 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 3

ACCESSION NUMBER: 2002:351679 CAPLUS

TITLE: Bass **hepcidin** is a novel antimicrobial peptide induced by bacterial challenge

AUTHOR(S): Shike, Hiroko; Lauth, Xavier; Westerman, Mark E.; Ostland, Vaughn E.; Carlberg, James M.; Van Olst, Jon C.; Shimizu, Chisato; Bulet, Philippe; Burns, Jane C.

CORPORATE SOURCE: Department of Pediatrics, San Diego School of Medicine, University of California, La Jolla, CA, 92093-0830, USA

SOURCE: European Journal of Biochemistry (2002), 269(8), 2232-2237
CODEN: EJBCAI; ISSN: 0014-2956

PUBLISHER: Blackwell Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We report the isolation of a novel antimicrobial peptide, bass **hepcidin**, from the gill of hybrid striped bass, white bass (Morone chrysops) .times. striped bass (M. saxatilis). After the i.p. injection of Micrococcus luteus and Escherichia coli, the peptide was purified from HPLC fractions with antimicrobial activity against Escherichia coli. Sequencing by Edman degrdn. revealed a 21-residue peptide (GCRFCCNCCPNMSGCGVCCRF) with eight putative cysteines. Mol. mass measurements of the native peptide and the reduced and alkylated peptide confirmed the sequence with four intramol. disulfide bridges. Peptide sequence homol. to human **hepcidin** and other predicted **hepcidins**, indicated that the peptide is a new member of the **hepcidin** family. Nucleotide sequences for cDNA and genomic DNA were detd. for white bass. A predicted prepropeptide (85 amino acids) consists of three domains: a signal peptide (24 amino acids), prodomain (40 amino acids) and a mature peptide (21 amino acids). The gene has two introns and three exons. A TATA box and several consensus-binding motifs for transcription factors including C/EBP, nuclear factor-.kappa.B, and hepatocyte nuclear factor were found in the region upstream of the transcriptional start site. In white bass liver, **hepcidin** gene expression was induced 4500-fold following challenge with the fish pathogen, Streptococcus iniae, while expression levels remained low in all other tissues tested. A novel antimicrobial peptide from the gill, bass **hepcidin**, is predominantly expressed in the liver and highly inducible by bacterial exposure.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L178 ANSWER 5 OF 33 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 2002172161 EMBASE

TITLE: Molecular diversity in gene-encoded, cationic antimicrobial polypeptides.

AUTHOR: Tossi A.; Sandri L.

CORPORATE SOURCE: A. Tossi, Dept. Biochem. Biophys./Mol. Chem., University of Trieste, Via Giorgieri 1, 34127 Trieste, Italy. tossi@bbcm.univ.trieste.it

SOURCE: Current Pharmaceutical Design, (2002) 8/9 (743-761).

Refs: 137
ISSN: 1381-6128 CODEN: CPDEFP
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 004 Microbiology
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Gene-encoded, ribosomally synthesised antimicrobial peptides (AMPs) are an ancient and pervasive component of the innate defence mechanisms used by multicellular organisms to control the natural flora and combat pathogens. Bacteria also produce such AMPs to maintain ecological niches free of rival strains. Several hundred different peptides have been characterised to date, and they show a marked degree of variability in both sequence and structure, having evolved to act against distinct microbial targets in different physiological contexts. Many of these peptides appear to function via a selective, but not receptor-mediated, permeabilisation of microbial membranes, while others interact with specific membrane associated or intracellular targets. This review presents a broad survey of different AMP structural classes, emphasising both their molecular diversity and underlying similarities. The mode of action of these peptides and potential for biomedical and other application is also briefly discussed.

L178 ANSWER 6 OF 33 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 4
ACCESSION NUMBER: 2002:255538 CAPLUS
DOCUMENT NUMBER: 136:399369
TITLE: Mechanisms of iron accumulation in hereditary hemochromatosis
AUTHOR(S): Fleming, Robert E.; Sly, William S.
CORPORATE SOURCE: Department of Pediatrics, Saint Louis University School of Medicine, St. Louis, MO, 63104, USA
SOURCE: Annual Review of Physiology (2002), 64, 663-680
CODEN: ARPHAD; ISSN: 0066-4278
PUBLISHER: Annual Reviews Inc.
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review. Hereditary hemochromatosis (HH) is a common inborn error of iron metab. characterized by excess dietary iron absorption and iron deposition in several tissues. Clin. consequences include hepatic failure, hepatocellular carcinoma, diabetes, cardiac failure, impotence, and arthritis. Despite the discovery of the mutation underlying most cases of HH, considerable uncertainty exists in the mechanism by which the normal gene product, HFE, regulates iron homeostasis. Knockout of the HFE gene clearly confers the HH phenotype on mice. However, studies on HFE expressed in cultured cells have not yet clarified the mechanism by which HFE mutations lead to increased dietary iron absorption. Recent discoveries suggest other genes, including a second transferrin receptor and the circulating peptide **hepcidin**, participate in a shared pathway with HFE in regulation of iron absorption. This review summarizes our current understanding of the relation between iron stores and absorption and presents models to explain the dysregulated iron homeostasis in HH.
REFERENCE COUNT: 104 THERE ARE 104 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L178 ANSWER 7 OF 33 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 5
ACCESSION NUMBER: 2002:238928 CAPLUS
DOCUMENT NUMBER: 137:44616
TITLE: Independent and overlapping transcriptional activation during liver development and regeneration in mice
AUTHOR(S): Kelley-Loughnane, Nancy; Sabla, Gregg E.; Ley-Ebert, Catherine; Aronow, Bruce J.; Bezerra, Jorge A.
CORPORATE SOURCE: Divisions of Gastroenterology, Hepatology, and

Nutrition, Children's Hospital Research Foundation and Department of Pediatrics, University of Cincinnati, Cincinnati, OH, USA

SOURCE: Hepatology (Philadelphia, PA, United States) (2002), 35(3), 525-534
CODEN: HPTLD9; ISSN: 0270-9139

PUBLISHER: W. B. Saunders Co.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Liver development and regeneration share the requirement for simultaneous proliferation and acquisition of highly specialized cellular functions. However, little is known about mols. with regulatory roles in both processes. We hypothesized that transcriptional reprogramming induced by regeneration recapitulates that of developing liver. To address this hypothesis, we detd. global hepatic gene expression at embryonic day 14.5, postnatal day 14, and 6 to 24 h following partial hepatectomy using microarrays contg. 8,635 cDNAs. Anal. of genes overexpressed during these conditions revealed 3 unique expression patterns. The first was predominantly signature gene clusters specific for each growth phase. Major groups were hematopoiesis-related genes in embryonic livers, metabolic genes during postnatal liver development, and growth/inflammation and metabolic genes during regeneration. The second pattern consisted of dual overexpression during regeneration and at least one phase of development. Consistent with potential regulatory roles in liver growth, most of these transcripts control cell-cell contact, membrane trafficking, cell growth, metab., and inflammatory response. The third pattern, revealed by surveying their expression across 76 hepatic and extra-hepatic tissues, uncovered a restricted temporospatial pattern of liver overexpression for CD14, orosomucoid 1, **hepcidin**, Spi 2.1, Ith3, and Tim-44. In conclusion, these results provide a basis for the identification of gene and gene groups that play crit. roles at different phases of liver development and regeneration, and underscore the importance of maintaining metabolic demands during organ growth.

REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L178 ANSWER 8 OF 33 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 6

ACCESSION NUMBER: 2002:418643 CAPLUS
TITLE: Chemical synthesis of .beta.-defensins and LEAP-1/**hepcidin**
AUTHOR(S): Kluver, E.; Schulz, A.; Forssmann, W.-G.; Adermann, K.
CORPORATE SOURCE: IPF Pharmaceuticals GmbH, Hanover, D-30625, Germany
SOURCE: Journal of Peptide Research (2002), 59(6), 241-248
CODEN: JPERFA; ISSN: 1397-002X

PUBLISHER: Blackwell Munksgaard
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A large and steadily growing subfamily of antimicrobially active peptides of animals and plants is formed by the defensins, which are highly disulfide-bonded, cationic peptides with a mol. mass of about 4 kDa. The synthesis of the human .beta.-defensins 1 and 2 (hBD-1, hBD-2) as well as of the novel murine .beta.-defensins 7 and 8 (mBD-7 and mBD-8) is reported. The peptides were synthesized by solid-phase peptide synthesis using fluorenylmethoxycarbonyl chem. The linear products were oxidized in the presence of the cysteine/cystine redox system to the biol. active mols. The correct disulfide connectivity of the resulting cyclic products was partly verified by mass spectrometry and sequence anal. of the fragments obtained after tryptic cleavage. In addn., the recently discovered antimicrobially active human peptide LEAP-1/**hepcidin**, which contains four disulfide bonds, was successfully synthesized and subsequently oxidized. For Liver-expressed anti microbial peptide (LEAP)-1/**hepcidin** and hBD-1, the identity of native and synthetic peptides was demonstrated by high-pressure liq. chromatog. and capillary electrophoretic anal. The general synthetic procedure is suitable to rapidly perform the total chem. synthesis of novel fully bioactive defensins, which are expected to be identified soon, as well as

of structurally modified analogs.
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L178 ANSWER 9 OF 33 SCISEARCH COPYRIGHT 2002 ISI (R) DUPLICATE 7
ACCESSION NUMBER: 2002:182021 SCISEARCH
THE GENUINE ARTICLE: 522FP
TITLE: Absence of **hepcidin** gene mutations in 10 Italian patients with primary iron overload
AUTHOR: Majore S; Binni F; Ricerca B M; Brioli G; Grammatico P (Reprint)
CORPORATE SOURCE: Univ Roma La Sapienza, Osp Spallanzani, Via Portuense 292, I-00149 Rome, Italy (Reprint); Univ Roma La Sapienza, Dep Expt Med & Pathol, I-00149 Rome, Italy; Univ Rome Sacro Cuore, Serv Hematol, Rome, Italy
COUNTRY OF AUTHOR: Italy
SOURCE: HAEMATOLOGICA, (FEB 2002) Vol. 87, No. 2, pp. 221-222. Publisher: FERRATA STORTI FOUNDATION, STRADA NUOVA 134, 27100 PAVIA, ITALY. ISSN: 0390-6078.
DOCUMENT TYPE: Letter; Journal
LANGUAGE: English
REFERENCE COUNT: 10

L178 ANSWER 10 OF 33 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.DUPLICATE 8
ACCESSION NUMBER: 2002104070 EMBASE
TITLE: Haemochromatosis: Understanding the mechanism of disease and implications for diagnosis and patient management following the recent cloning of novel genes involved in iron metabolism.
AUTHOR: Fletcher L.M.; Halliday J.W.
CORPORATE SOURCE: Prof. J.W. Halliday, 38 Castile Street, Indooroopilly, QLD 4068, Australia. jhallid@tpgi.com.au
SOURCE: Journal of Internal Medicine, (2002) 251/3 (181-192). Refs: 62 ISSN: 0954-6820 CODEN: JINMEO
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 005 General Pathology and Pathological Anatomy
006 Internal Medicine
048 Gastroenterology
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Haemochromatosis, a common recessive genetic disorder in people of Northern European descent, is an iron storage disorder characterized by excessive hepatic iron accumulation resulting from disruption of the regulation of intestinal iron absorption. The identification of novel genes involved in the control of iron absorption from the diet has allowed improved understanding of iron metabolism in health and disease. In particular, the identification of the haemochromatosis gene (HFE) and more recently the transferrin receptor 2 gene (TfR2) together with the specific mutations in these genes which result in hepatic iron overload, has enhanced our understanding of the pathophysiology of haemochromatosis. However, because of the wide variation in phenotypic expression of the disease, there now exists a considerable challenge to diagnosis and patient management.

L178 ANSWER 11 OF 33 SCISEARCH COPYRIGHT 2002 ISI (R)
ACCESSION NUMBER: 2002:385193 SCISEARCH
THE GENUINE ARTICLE: 536RA
TITLE: HFE is required for **hepcidin** upregulation in response to iron loading
AUTHOR: Ahmad K A (Reprint); Migas M C; Waheed A; Britton R S; Bacon B R; Sly W S; Fleming R E
CORPORATE SOURCE: St Louis Univ, Sch Med, Dept Biochem & Mol Biol, St Louis, MO 63104 USA; St Louis Univ, Sch Med, Dept Pediat, St

Louis, MO 63104 USA; St Louis Univ, Sch Med, Dept Med, St Louis, MO 63104 USA
COUNTRY OF AUTHOR: USA
SOURCE: PEDIATRIC RESEARCH, (APR 2002) Vol. 51, No. 4, Part 2, Supp. [S], pp. 137A-137A. MA 798.
Publisher: INT PEDIATRIC RESEARCH FOUNDATION, INC, 351 WEST CAMDEN ST, BALTIMORE, MD 21201-2436 USA.
ISSN: 0031-3998.
DOCUMENT TYPE: Conference; Journal
LANGUAGE: English
REFERENCE COUNT: 0

L178 ANSWER 12 OF 33 MEDLINE
ACCESSION NUMBER: 2001408221 MEDLINE
DOCUMENT NUMBER: 21353036 PubMed ID: 11459944
TITLE: **Hepcidin**: a putative iron-regulatory hormone relevant to hereditary hemochromatosis and the anemia of chronic disease.
COMMENT: Comment on: Proc Natl Acad Sci U S A. 2001 Jul 17;98(15):8780-5
AUTHOR: Fleming R E; Sly W S
CORPORATE SOURCE: Department of Pediatrics, Saint Louis University School of Medicine, St. Louis, MO 63014, USA.
SOURCE: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (2001 Jul 17) 98 (15) 8160-2.
Ref: 30
Journal code: 7505876. ISSN: 0027-8424.
PUB. COUNTRY: United States
Commentary
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200108
ENTRY DATE: Entered STN: 20010903
Last Updated on STN: 20010903
Entered Medline: 20010830

L178 ANSWER 13 OF 33 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 9
ACCESSION NUMBER: 2001:403041 CAPLUS
DOCUMENT NUMBER: 135:29859
TITLE: Antibiotic peptides from human mouse and rat
INVENTOR(S): Ito, Yasuaki; Ogi, Kazuhiro; Nishi, Kazunori; Tanaka, Hideyuki
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 41 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001149083	A2	20010605	JP 2000-276083	20000912

PRIORITY APPLN. INFO.: JP 1999-262228 A 19990916
AB A novel peptide expressed in human liver and activated macrophage with antibiotic and cell function regulatory activities, and its mouse and rat homologs, are disclosed. Antibodies to the peptides as diagnostic agent, method and reagent kits for screening of activators/inhibitors as drugs for infection, septicemia, drug intoxication/poisoning, tuberculosis, cancer, liver function disorder/impairment, immune function disorder/impairment, or endocrine disorder, are claimed. Recombinant expression of human peptide in COS-7 cells and CHO-K1 cells, is described.

L178 ANSWER 14 OF 33 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 10
ACCESSION NUMBER: 2001:561175 CAPLUS
DOCUMENT NUMBER: 135:271120
TITLE: Lack of **hepcidin** gene expression and severe tissue iron overload in upstream stimulatory factor 2 (USF2) knockout mice
AUTHOR(S): Nicolas, Gael; Bennoun, Myriam; Devaux, Isabelle; Beaumont, Carole; Grandchamp, Bernard; Kahn, Axel; Vaulont, Sophie
CORPORATE SOURCE: Institut National de la Sante et de la Recherche Medicale 129, Departement Genetique Developpement et Pathologie Moleculaire, Institut Cochin de Genetique Moleculaire, Faculte de Medicine Cochin-Port Royal, Paris, 75014, Fr.
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2001), 98(15), 8780-8785
CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English
AB We previously reported the disruption of the murine gene encoding the transcription factor USF2 and its consequences on glucose-dependent gene regulation in the liver. We report here a peculiar phenotype of Usf2-/- mice that progressively develop multi-visceral iron overload; plasma iron overcomes transferrin binding capacity, and nontransferrin-bound iron accumulates in various tissues including pancreas and heart. In contrast, the splenic iron content is strikingly lower in knockout animals than in controls. To identify genes that may account for the abnormalities of iron homeostasis in Usf2-/- mice, we used suppressive subtractive hybridization between livers from Usf2-/- and wild-type mice. We isolated a cDNA encoding a peptide, **hepcidin** (also referred to as LEAP-1, for liver-expressed antimicrobial peptide), that was very recently purified from human blood ultrafiltrate and from urine as a disulfide-bonded peptide exhibiting antimicrobial activity. Accumulation of iron in the liver has been recently reported to up-regulate **hepcidin** expression, whereas our data clearly show that a complete defect in **hepcidin** expression is responsible for progressive tissue iron overload. The striking similarity of the alterations in iron metab. between HFE knockout mice, a murine model of hereditary hemochromatosis, and the Usf2-/- **hepcidin**-deficient mice suggests that **hepcidin** may function in the same regulatory pathway as HFE. We propose that **hepcidin** acts as a signaling mol. that is required in conjunction with HFE to regulate both intestinal iron absorption and iron storage in macrophages.
REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L178 ANSWER 15 OF 33 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 11
ACCESSION NUMBER: 2001:561076 CAPLUS
DOCUMENT NUMBER: 135:342157
TITLE: **Hepcidin**: A putative iron-regulatory hormone relevant to hereditary hemochromatosis and the anemia of chronic disease
AUTHOR(S): Fleming, Robert E.; Sly, William S.
CORPORATE SOURCE: Department of Pediatrics, Saint Louis University School of Medicine, St. Louis, MO, 63014, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2001), 98(15), 8160-8162
CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review, with refs. The role of **hepcidin** as putative iron-regulatory hormone in hereditary hemochromatosis and the anemia of chronic disease is discussed.
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

WEST Search History

DATE: Monday, July 22, 2002

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT,PGPB,EPAB,DWPI,TDBD; PLUR=YES; OP=ADJ			
L2	pollutant? and PAH and expression and exposure	20	L2
L1	pollutant? and PAH and expression	24	L1

END OF SEARCH HISTORY

WEST

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Search Results - Record(s) 1 through 24 of 24 returned.

☐ 1. Document ID: US 20020091247 A1

L1: Entry 1 of 24 File: PGPB Jul 11, 2002

PGPUB-DOCUMENT-NUMBER: 20020091247
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020091247 A1

TITLE: Polycyclic aromatic hydrocarbon induced molecules

PUBLICATION-DATE: July 11, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kaser, Matthew R.	Castro Valley	CA	US	
Azimzai, Yalda	Hayward	CA	US	
Yue, Henry	Sunnyvale	CA	US	

US-CL-CURRENT: 536/23.2; 435/6, 435/7.1, 530/350

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

☐ 2. Document ID: US 20020028444 A1

L1: Entry 2 of 24 File: PGPB Mar 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020028444
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020028444 A1

TITLE: METHOD AND KITS FOR PREPARING MULTICOMPONENT NUCLEIC ACID CONSTRUCTS

PUBLICATION-DATE: March 7, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
HARNEY, PETER D.	ALISO VIEJO	CA	US	
HARNEY, JENNIFER	ALISO VIEJO	CA	US	

US-CL-CURRENT: 435/6

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

☐ 3. Document ID: US 20020025517 A1

L1: Entry 3 of 24 File: PGPB Feb 28, 2002

PGPUB-DOCUMENT-NUMBER: 20020025517

PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020025517 A1

TITLE: METHODS AND COMPOSITIONS FOR CELLULAR AND METABOLIC ENGINEERING

PUBLICATION-DATE: February 28, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
MINSHULL, JEREMY	SAN FRANCISCO	CA	US	
STEMMER, WILLEM P. C.	LOS GATOS	CA	US	

US-CL-CURRENT: 435/6; 435/91.2

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 4. Document ID: US 20010029049 A1

L1: Entry 4 of 24 File: PGPB Oct 11, 2001

PGPUB-DOCUMENT-NUMBER: 20010029049
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20010029049 A1

TITLE: "SELF - ENCODING SENSOR WITH MICROSPHERES "

PUBLICATION-DATE: October 11, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
WALT, DAVID R.	LEXINGTON	MA	US	
DICKINSON, TODD A.	SAN DIEGO	CA	US	

US-CL-CURRENT: 436/518

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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☐ 5. Document ID: US 20010023847 A1

L1: Entry 5 of 24 File: PGPB Sep 27, 2001

PGPUB-DOCUMENT-NUMBER: 20010023847
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20010023847 A1

TITLE: Method and apparatus for anaerobically degrading pollutants with alkanes

PUBLICATION-DATE: September 27, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Perriello, Felix Anthony	Norwood	MA	US	

US-CL-CURRENT: 210/611; 210/620, 210/908, 210/909

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

☐ 6. Document ID: US 6409821 B1

L1: Entry 6 of 24 File: USPT

US-PAT-NO: 6409821
DOCUMENT-IDENTIFIER: US 6409821 B1

TITLE: Hydraulic binder and cement compositions containing photocatalyst particles

DATE-ISSUED: June 25, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cassar; Luigi	Milan			IT
Pepe; Carmine	Bergamo			IT

US-CL-CURRENT: 106/733; 106/819

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

☐ 7. Document ID: US 6391640 B1

L1: Entry 7 of 24 File: USPT

US-PAT-NO: 6391640
DOCUMENT-IDENTIFIER: US 6391640 B1

TITLE: Methods and compositions for cellular and metabolic engineering

DATE-ISSUED: May 21, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Minshull; Jeremy	San Francisco	CA		
Stemmer; Willem P. C.	Los Gatos	CA		

US-CL-CURRENT: 435/440; 435/6, 435/91.2, 536/23.1, 536/24.3

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

☐ 8. Document ID: US 6327410 B1

L1: Entry 8 of 24 File: USPT

US-PAT-NO: 6327410
DOCUMENT-IDENTIFIER: US 6327410 B1

TITLE: Target analyte sensors utilizing Microspheres

DATE-ISSUED: December 4, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Walt; David R.	Lexington	MA		
Michael; Karri L.	Somerville	MA		

US-CL-CURRENT: 385/115; 359/900, 385/12, 385/147, 385/38, 435/808

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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☐ 9. Document ID: US 6309883 B1

L1: Entry 9 of 24 File: USPT

US-PAT-NO: 6309883
DOCUMENT-IDENTIFIER: US 6309883 B1

TITLE: Methods and compositions for cellular and metabolic engineering

DATE-ISSUED: October 30, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Minshull; Jeremy	San Francisco	CA		
Stemmer; Willem P. C.	Los Gatos	CA		

US-CL-CURRENT: 435/440; 435/6, 536/23.1, 536/24.3

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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☐ 10. Document ID: US 6266459 B1

L1: Entry 10 of 24 File: USPT

US-PAT-NO: 6266459
DOCUMENT-IDENTIFIER: US 6266459 B1

TITLE: Fiber optic sensor with encoded microspheres

DATE-ISSUED: July 24, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Walt; David R.	Lexington	MA		
Michael; Karri Lynn	Somerville	MA		

US-CL-CURRENT: 385/12; 345/808, 359/900, 385/147, 385/38, 435/808

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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☐ 11. Document ID: US 6262247 B1

L1: Entry 11 of 24 File: USPT

US-PAT-NO: 6262247
DOCUMENT-IDENTIFIER: US 6262247 B1

TITLE: Polycyclic aromatic hydrocarbon induced molecules

DATE-ISSUED: July 17, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kaser; Matthew R.	Castro Valley	CA		
Azimzai; Yalda	Hayward	CA		
Yue; Henry	Sunnyvale	CA		

US-CL-CURRENT: 536/23.5; 435/6, 536/23.1, 536/24.31

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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☐ 12. Document ID: US 6136576 A

L1: Entry 12 of 24 File: USPT

US-PAT-NO: 6136576
DOCUMENT-IDENTIFIER: US 6136576 A

TITLE: Method for the recombinant production of 1,3-propanediol

DATE-ISSUED: October 24, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Diaz-Torres; Maria	San Mateo	CA		
Dunn-Coleman; Nigel S	Los Gatos	CA		
Chase; Matthew W.	Belmont	CA		
Trimbur; Donald	Redwood City	CA		

US-CL-CURRENT: 435/158; 435/232, 530/350, 536/23.1, 536/23.2, 536/23.7

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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☐ 13. Document ID: US 6117643 A

L1: Entry 13 of 24 File: USPT

US-PAT-NO: 6117643
DOCUMENT-IDENTIFIER: US 6117643 A

TITLE: Bioluminescent bioreporter integrated circuit

DATE-ISSUED: September 12, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Simpson; Michael L.	Knoxville	TN		
Sayler; Gary S.	Blaine	TN		
Paulus; Michael J.	Knoxville	TN		

US-CL-CURRENT: 435/7.1; 422/55, 422/57, 422/58, 422/82.01, 422/82.05, 422/82.06,

422/82.07, 422/82.08, 435/287.1, 435/287.2, 435/288.7, 435/6, 435/7.32, 435/808, 436/518, 436/524, 436/525, 436/531, 436/805

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 14. Document ID: US 6015498 A

L1: Entry 14 of 24 File: USPT

US-PAT-NO: 6015498
DOCUMENT-IDENTIFIER: US 6015498 A

TITLE: Coal ashes used for treating various media and facilities for using same

DATE-ISSUED: January 18, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gleizes; Raymond M.	95680 Montlignon			FR

US-CL-CURRENT: 210/688; 134/7, 210/143, 210/194, 210/241, 210/251, 210/691, 425/62

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 15. Document ID: US 5854010 A

L1: Entry 15 of 24 File: USPT

US-PAT-NO: 5854010
DOCUMENT-IDENTIFIER: US 5854010 A

TITLE: Bioassay for detecting 2,3,7,8-tetrachlorodibenzo-para-dioxin and TCDD-like compounds and novel recombinant cell line useful therefor

DATE-ISSUED: December 29, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Denison; Michael S.	Dixon	CA	95620	
Brouwer; Abraham	6703 GX Wageningen			NL
Clark; George C.	Durham	NC	27703	

US-CL-CURRENT: 435/8; 435/354, 549/359

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 16. Document ID: US 5849906 A

L1: Entry 16 of 24 File: USPT

US-PAT-NO: 5849906
DOCUMENT-IDENTIFIER: US 5849906 A

TITLE: Antigenic conjugates of polycyclic aromatic hydrocarbons to nucleosides

DATE-ISSUED: December 15, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cavalieri; Ercole	Waterloo	NE	68069	
Rogan; Eleanor	Omaha	NE	68144	

US-CL-CURRENT: 536/55.3; 536/22.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

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☐ 17. Document ID: US 5837458 A

L1: Entry 17 of 24 File: USPT

US-PAT-NO: 5837458
DOCUMENT-IDENTIFIER: US 5837458 A

TITLE: Methods and compositions for cellular and metabolic engineering

DATE-ISSUED: November 17, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Minshull; Jeremy	San Francisco	CA		
Stemmer; Willem P. C.	Los Gatos	CA		

US-CL-CURRENT: 435/6

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

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☐ 18. Document ID: US 5807690 A

L1: Entry 18 of 24 File: USPT

US-PAT-NO: 5807690
DOCUMENT-IDENTIFIER: US 5807690 A

TITLE: Method of screening physiological samples for elevated levels of heat shock proteins

DATE-ISSUED: September 15, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sanders; Brenda M.	Long Beach	CA		
Jenkins; Kenneth D.	Long Beach	CA		
Nichols; Jack L.	Vancouver			CA
Imber; Bryan E.	Victoria			CA

US-CL-CURRENT: 435/7.21; 435/29, 435/7.1, 435/7.2, 435/7.22, 435/7.31, 435/7.32, 436/501, 436/503, 436/8

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

☐ 19. Document ID: US 5780246 A

L1: Entry 19 of 24 File: USPT

US-PAT-NO: 5780246
DOCUMENT-IDENTIFIER: US 5780246 A

TITLE: Accumulation of heat shock proteins for evaluating biological damage due to chronic exposure of an organism to sublethal levels of stressors

DATE-ISSUED: July 14, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sanders; Brenda M.	Long Beach	CA		
Jenkins; Kenneth D.	Long Beach	CA		
Nichols; Jack L.	West Vancouver			CA
Imber; Bryan E.	Victoria			CA

US-CL-CURRENT: 435/7.21; 435/29, 435/7.1, 435/7.2, 435/7.22, 435/7.31, 435/7.32, 436/15, 436/501, 436/8

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

☐ 20. Document ID: US 5731163 A

L1: Entry 20 of 24 File: USPT

US-PAT-NO: 5731163
DOCUMENT-IDENTIFIER: US 5731163 A

TITLE: Lyophilized bioluminescent bacterial reagent for the detection of toxicants

DATE-ISSUED: March 24, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Vandyk; Tina Kangas	Wilmington	DE		
Wagner; Lorraine Winona	Newark	DE		

US-CL-CURRENT: 435/7.32; 435/252.3, 435/6, 435/8

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

☐ 21. Document ID: US 5683868 A

L1: Entry 21 of 24 File: USPT

US-PAT-NO: 5683868
DOCUMENT-IDENTIFIER: US 5683868 A

TITLE: Highly sensitive method for detecting environmental insults

DATE-ISSUED: November 4, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
LaRossa; Robert Alan	West Chester	PA		
Majarian; William Robert	Mount Royal	NJ		
Van Dyk; Tina Kangas	Wilmington	DE		

US-CL-CURRENT: 435/6; 435/252.33, 435/29, 435/8, 536/23.2, 536/23.7, 536/24.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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☐ 22. Document ID: US 5567324 A

L1: Entry 22 of 24 File: USPT

US-PAT-NO: 5567324
DOCUMENT-IDENTIFIER: US 5567324 A

TITLE: Method of biodegrading hydrophobic organic compounds

DATE-ISSUED: October 22, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rothmel; Randi K.	Mt. Holly	NJ		
Unterman; Ronald	Lawrenceville	NJ		

US-CL-CURRENT: 210/611; 134/19, 134/26, 134/42, 210/612, 210/909, 435/262.5, 435/821, 588/209

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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☐ 23. Document ID: US 5464750 A

L1: Entry 23 of 24 File: USPT

US-PAT-NO: 5464750
DOCUMENT-IDENTIFIER: US 5464750 A

TITLE: Accumulation of heat shock proteins for evaluating biological damage due to chronic exposure of an organism to sublethal levels of pollutants

DATE-ISSUED: November 7, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sanders; Brenda M.	Long Beach	CA		
Jenkins; Kenneth D.	Long Beach	CA		
Nichols; Jack L.	Vancouver			CA
Imber; Bryan E.	Victoria			CA

US-CL-CURRENT: 435/7.21; 435/29, 435/7.1, 435/7.2, 435/7.22, 435/7.31, 435/7.32, 436/501

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

☐ 24. Document ID: US 5232833 A

L1: Entry 24 of 24 File: USPT

US-PAT-NO: 5232833
DOCUMENT-IDENTIFIER: US 5232833 A

TITLE: Accumulation of heat shock proteins for evaluating biological damage due to chronic exposure of an organism to sublethal levels of pollutants

DATE-ISSUED: August 3, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sanders; Brenda M.	Long Beach	CA		
Jenkins; Kenneth D.	Long Beach	CA		
Nichols; Jack L.	Vancouver			CA
Imber; Bryan E.	Victoria			CA

US-CL-CURRENT: 435/7.21; 435/29, 435/7.2, 435/7.22, 435/7.31, 435/7.32

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments

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